

WHAT IS CLAIMED IS:

1. An image pickup apparatus comprising:

an image pickup means for outputting an image
signal having a first number of pixels which is greater
5 than a predetermined number of pixels;

a converting means for converting the image signal
having the first number of pixels, outputted from said
image pickup means, into an image signal having the
predetermined number of pixels;

10 a first memory having storage capacity
corresponding to the predetermined number of pixels,
for storing the image signal having the predetermined
number of pixels, outputted from said converting means;

a second memory having storage capacity
15 corresponding to the first number of pixels, for
storing the image signal having the first number of
pixels, outputted from said image pickup means; and

still image processing means for outputting as
still image data the image signal having the first
20 number of pixels, read out from said second memory.

2. An apparatus according to claim 1, wherein
said converting means, said first memory and said still
image processing means are provided on a same
25 integrated circuit, and said second memory is built as
a separate circuit from said integrated circuit.

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3. An apparatus according to claim 2, further comprising special effect means for performing a special effect processing on the image signal having the predetermined number of pixels, stored in said first memory and outputting the thus-processed image signal, wherein said special effect means is provided on said integrated circuit.

4. An apparatus according to claim 2, further comprising output means for converting the image signal having the predetermined number of pixels, stored in said first memory into a predetermined format and outputting the thus-converted image signal, wherein said output means is provided on said integrated circuit.

5. An apparatus according to claim 1, further comprising recording means for recording onto a recording medium the image signal read out from said first memory, wherein the predetermined number of pixels is a number of pixels determined in accordance with a recording format of said recording means.

6. An apparatus according to claim 1, wherein said still image processing means includes encoding means for encoding the image signal outputted from said second memory and compressing an amount of information

10000087-120401

of the image signal.

7. An apparatus according to claim 1, wherein
said still image processing apparatus includes a moving
5 image processing mode and a still image processing
mode, wherein in the moving image processing mode, said
image pickup means adds together signals of pixels of
vertically-adjacent lines of image pickup elements and
reads out the added signals, and in the still image
10 processing mode, said image pickup means reads out the
signal of each line of the image pickup elements
independently.

8. An apparatus according to claim 1, further
15 comprising:

moving image processing means for reading out from
said first memory an image signal having the
predetermined number of pixels and outputting the read-
out image signal as moving image data;

20 first recording means for recording to a first
recording medium the moving image data outputted from
said moving image processing means; and

second recording means for recording to a second
recording medium, which is different from the first
25 recording medium, the moving image data outputted from
said still image processing means.

10000087-120401

9. An apparatus according to claim 8, wherein the first recording medium is a magnetic tape, and the second recording medium is a memory card.

5 10. An image processing apparatus comprising:
 an input unit arranged to input an image signal having a first number of pixels which is greater than a predetermined number of pixels;

 a conversion circuit arranged to convert the
10 inputted image signal having the first number of pixels into an image signal having the predetermined number of pixels;

 a first memory having storage capacity sufficient for the predetermined number of pixels, arranged to
15 store the image signal having the predetermined number of pixels, outputted from said conversion circuit;

 a memory interface arranged to write into a second memory having a storage capacity corresponding to the first number of pixels, the image signal having the
20 first number of pixels, outputted from the input unit, and read out from said second memory the image signal having the first number of pixels; and

 a still image processing circuit arranged to output as still image data the image signal having the
25 first number of pixels, read out by the memory interface, wherein said input unit, said conversion circuit, said first memory, said memory interface and

10000087-120401

said still image processing circuit are provided on a same integrated circuit, and said second memory is built as a circuit different from said integrated circuit.

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11. An image pickup apparatus comprising:

an image pickup means for outputting an image signal having a first number of pixels which is greater than a predetermined number of pixels;

10 converting means for converting the image signal, having the first number of pixels, outputted from said image pickup means into an image signal having the predetermined number of pixels;

15 a first memory for storing the image signal having the predetermined number of pixels;

a second memory for storing the image signal having the first number of pixels;

20 a memory interface for writing to said first memory the image signal having the predetermined number of pixels, outputted from the converting means, reading out from said first memory the image signal having the predetermined number of pixels, writing into said second memory the image signal having the first number of pixels, outputted from the inputted image pickup
25 means, reading out from said second memory the image signal having the first number of pixels;

moving image processing means for outputting as

10000087-120401

moving image data the image signal having the predetermined number of pixels, read out from the first memory; and

5 still image processing means for outputting as still image data the image signal having the first number of pixels, read out from the second memory, wherein said converting means, said memory interface, said moving image processing means and said still image processing means are provided on a same integrated
10 circuit, and said first memory and said second memory are each built as independent circuits from said integrated circuit.

12. An apparatus according to claim 11, further
15 comprising:

first recording means for recording onto a first recording medium the moving image data outputted from said moving image processing means; and

20 second recording means for recording the moving image data outputted from said still image processing means onto a second recording medium which is different from the first recording medium.

13. An apparatus according to claim 12, wherein
25 the first recording medium is a magnetic tape, and the second recording medium is a memory card.

10000087-120401

14. An image processing apparatus comprising:

an input unit arranged to input an image signal having a first number of pixels which is greater than a predetermined number of pixels;

5 a conversion circuit arranged to convert the image signal having the first number of pixels, outputted from the input unit, into an image signal having the predetermined number of pixels;

10 a memory interface arranged to write into a first memory for a moving image the image signal having the predetermined number of pixels, outputted from said conversion circuit, read out the image signal having the predetermined number of pixels from said first memory, write into a second memory the image signal having the first number of pixels, outputted from the input unit, and read out from said second memory the image signal having the first number of pixels;

15 a moving image processing circuit arranged to output as moving image data the image signal having the predetermined number of pixels, read out from said first memory; and

20 a still image processing circuit arranged to output as still image data the image signal having the first number of pixels, read out from the second memory, wherein said input unit, said conversion circuit, said memory interface, said moving image processing circuit and said still image processing

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circuit are provided on a same integrated circuit, and each of said first and said second memory is built as a circuit independent of said integrated circuit.

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